

MPPT Solar charge controller

New Tracer series



New Tracer series is EPsolar's second generation of MPPT controller. Compared with CLASSIC Tracer series, it has extensive communication ability. And the die-cast aluminum design ensures excellent heat dispersion.

Compared to conventional PWM controller, MPPT technology increases the charge efficiency up to 30% and potentially decrease the power of solar array needed.



Models:

Tracer1215BN, 10A, 12/24V auto work

Tracer2215BN, 20A, 12/24V auto work

Tracer3215BN, 30A, 12/24V auto work

Tracer4215BN, 40A, 12/24V auto work

Features:

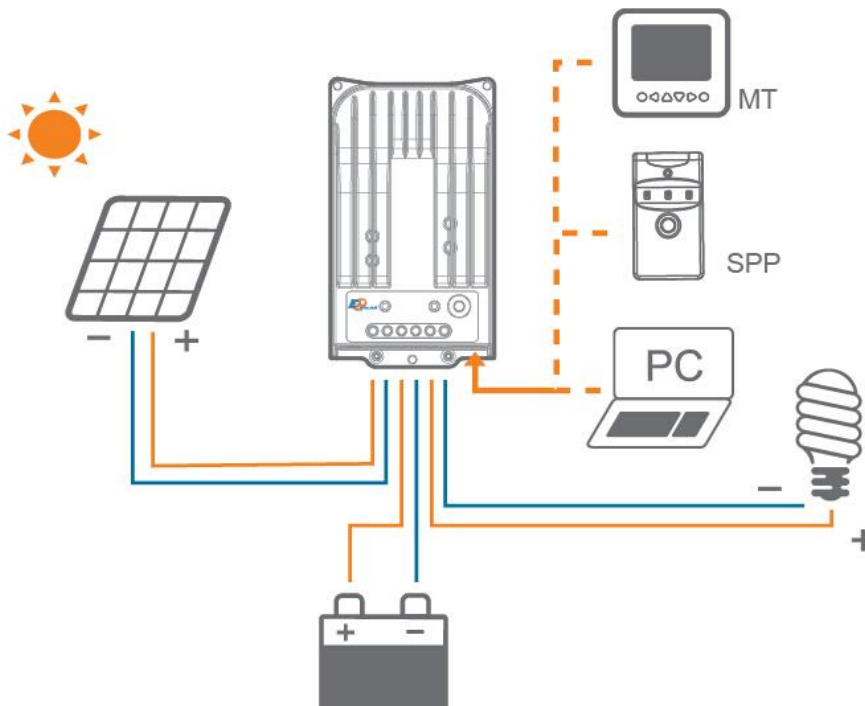
- ◆ Innovative MPPT technology
- ◆ Peak conversion efficiency of 98%
- ◆ High tracking efficiency up to 99%
- ◆ Several seconds tracking speed
- ◆ Die-cast aluminum design and nature cooling
- ◆ Temperature compensation

- ◆ Diversified load control to meet different requirements
- ◆ Four battery type options: Sealed, Gel, Flooded, and USER
- ◆ Intelligent lighting and timer control for solar lighting system
- ◆ Energy statistics function
- ◆ RS485 ports with MODBUS communication protocol
- ◆ Optional PC monitoring software and remote meter for real-time monitoring and battery management parameter setting
- ◆ Field upgradable firmware

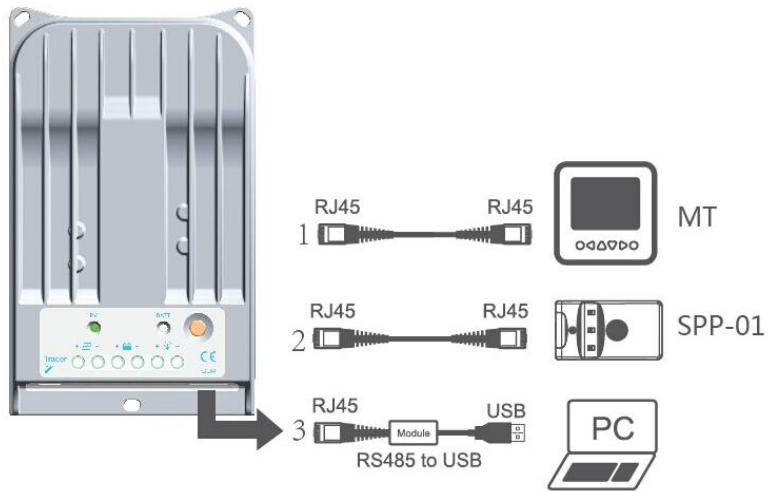


Electronic protections:

- ◆ PV short circuit protection
- ◆ PV current limiting protection
- ◆ Battery overcharge protection
- ◆ Battery reverse polarity protection
- ◆ Load short circuit protection
- ◆ PV overvoltage alarm protection
- ◆ PV reverse polarity protection
- ◆ Battery over discharge protection
- ◆ Load overload protection
- ◆ Overheating protection





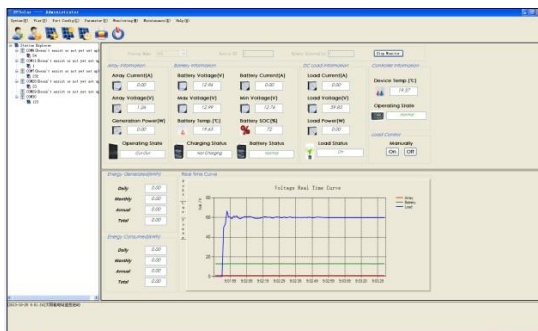


Three methods to configure the controller:
 1–Remote Meter, MT50
 2–Super Parameter Programmer, One-key easily configure and apply to batch setting.
 3–PC monitoring setting software “Solar Station Monitor”

Optional accessories :

<p>Remote meter MT50</p>	<p>Remote temperature sensor RTS300R47K3.81A</p>	<p>PC communication cable CC-USB-RS485-150U</p>	<p>Super parameter programmer SPP-01</p>

PC software:



Technical specifications

Model	Tracer1215BN	Tracer2215BN	Tracer3215BN	Tracer4215BN
Nominal system voltage	12/24V auto work			
Rated battery current	10A	20A	30A	40A
Rated load current	10A	20A	20A	20A
Max. PV open circuit voltage	150V			
Max. battery voltage	32V			
Max. PV input power	130W (12V)	260W (12V)	390W (12V)	520W (12V)
	260W (24V)	520W (24V)	780W (24V)	1040W (24V)
Equalize charging voltage	Gel: 14.2V, Sealed: 14.6V, Flooded: 14.8V, USER: 9~17V			
Boost charging voltage	Gel: 14.2V, Sealed: 14.6V, Flooded: 14.8V, USER: 9~17V			
Float charging voltage	Gel /Sealed /Flooded: 13.8V, USER: 9~17V			
Low voltage reconnect voltage	Gel /Sealed /Flooded: 12.6V, USER: 9~17V			
Low voltage disconnect voltage	Gel /Sealed /Flooded: 11.1V, USER: 9~17V			
Self-consumption	≤50mA(12V) ≤27mA(24V)			
Grounding	Common negative			
Temp. compensation	-3mV/°C/2V			
Communication Port	RS485 / RJ45 interface			

* Technical data for 12V system at 25°C

Mechanical	Tracer1215BN	Tracer2215BN	Tracer3215BN	Tracer4215BN
Overall dimension	196x118x36mm	217x143x56mm	281x160x60mm	303x183x64mm
Terminal	4mm ²	10mm ²	16mm ²	25mm ²
Net weight	0.9kg	1.5kg	2.3kg	2.9kg
Enclosure	IP30			

Environmental

Working temperature	-35°C ~ +55°C
Storage temperature	-35°C ~ +80°C
Humidity	≤95% N.C.

Conversion efficiency curves:

Illumination Intensity: 1000W/m² Temperature: 25°C
Test model: Tracer3215B

